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THE RELATIONSHIP BETWEEN KNOWLEDGE OF ICU CARE AND THE LEVEL OF FAMILY ANXIETY IN THE ICU ROOM OF RSI PATI

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Abstract

The Intensive Care Unit (ICU) is a hospital service that handles critically ill patients, caring for those at high risk of developing an emergency. This is what creates a sense of security for the patient's family. The aim of this study was to determine the relationship between knowledge of ICU care and the level of anxiety of families undergoing care in the ICU. This study is a quantitative descriptive correlation study. The sample size was 21 respondents using total sampling and analyzed using sperm rink. The results of the study between the level of knowledge of ICU care and the level of family anxiety in the ICU room of RSI Pati obtained p (sig) = 0.000. Conclusion: This study found a correlation between knowledge of ICU care and the level of family anxiety.

Keywords: ***ICU care knowledge, family anxiety.***

INTRODUCTION

The Intensive Care Unit (ICU) is a hospital service that treats patients in critical condition, equipped with trained medical personnel and specialized facilities, and is under the service director as part of the hospital installation. The ICU functions for observation, therapy, and treatment of patients with life-threatening illnesses, complications, or injuries (Sangadah & Kartawidjaja, 2020). The WHO reported that in 2018, the prevalence of critical patients increased by 9.8%–24.6% per year, while in Indonesia the prevalence of critical illnesses such as stroke, cancer, chronic kidney disease, diabetes mellitus, and hypertension increased from 2013 to 2018 (Sangadah & Kartawidjaja, 2020). Knowledge is acquired through the senses of sight and hearing, and the more information and experience received, the greater their insight (Bloor & Wood, 2019). In the context of ICU care, limited family knowledge can trigger anxiety, which impacts the family's overall well-being. Anxiety arises from the patient's clinical condition, the severity of the disease, and a lack of information. With adequate knowledge and information, the patient's family can experience reduced anxiety, resulting in more optimal patient care.

Factors influencing anxiety include age, gender, education level, environment, and knowledge. Anxiety reduction can be achieved through pharmacological and non-pharmacological approaches. Pharmacological approaches use anti-anxiety medications but carry the risk of dependence, while non-pharmacological approaches can include psychological therapy. Family knowledge about ICU care is expected to reduce anxiety levels, which are characterized by worry, tension, and nervousness (Syarifudin, 2020). More than 66.67% of families of ICU patients experience anxiety and depression (Syarifudin, 2020). Previous research has shown a significant relationship between family knowledge and anxiety in the ICU. Veronica Pelapu, Joost Rumampuk, and Maykel Killing (2018) found a significant relationship based on the Spearman Rho test, and Ekawati Hijriyah (2021) also reported a relationship between family knowledge and anxiety levels. Mariati (2022) noted that of 44 respondents, 36.4% experienced mild anxiety, 27.3% moderate anxiety, 20.5% no anxiety, 13.6% severe anxiety, and 2.3% experienced panic. Ekawati (2021) recorded a P value of 0.01, indicating a significant relationship between family knowledge and anxiety in the ICU. Data from Pati Islamic Hospital shows an average of 28 ICU patients per month. A preliminary study of 8 respondents showed that 6 families of patients did not understand ICU care, with 3 experiencing severe anxiety, 2 experiencing moderate anxiety, and 1 experiencing mild anxiety. These findings suggest that family anxiety is influenced by a lack of understanding of ICU care. Based on this, researchers conducted

a study entitled "The Relationship Between Family Knowledge of ICU Care and Family Anxiety Levels in the ICU at Pati Islamic Hospital." This study aims to determine the relationship between family knowledge about ICU care and the level of anxiety of patient families in the ICU of RSI Pati. Specifically, it aims to identify respondent characteristics, knowledge levels, and anxiety levels, and analyze the relationship between the two. The theoretical benefits of this study are to serve as a reference regarding the relationship between family knowledge and patient anxiety in the ICU. Practical benefits include increasing public understanding, serving as a reference for further research, and providing input for health institutions. Although similar studies have existed previously, this study is unique because it uses different samples, locations, and times, thus maintaining its novelty.

LITERATURE REVIEW

The family is the smallest unit of society, consisting of two or more individuals bound by blood, marriage, or adoption, interacting with each other, and playing a role in maintaining and creating culture (Sangadah & Kartawidjaja, 2020). Family characteristics include marital relations, economic functions, shared residence, and deliberative decision-making based on cultural values and a spirit of mutual cooperation. Family types are divided into traditional, such as nuclear and extended families, and modern, which includes various forms, such as reconstituted nuclear, single-parent, dual-carrier, and other family forms that arise due to changing individual roles and increasing individualism. Family functions include affective functions to meet psychosocial needs and build a positive self-image, socialization functions to instill cultural values and behavioral norms, economic functions to meet material needs, reproductive functions to maintain the continuity of generations, and health maintenance functions to ensure family members remain productive (Syarifudin, 2020; Sangadah & Kartawidjaja, 2020). Family structure includes role structures, communication, power, and values and norms that regulate behavior, interaction, and influence between family members.

Anxiety is defined as a feeling of fear or worry without a clear stimulus, characterized by physiological symptoms such as tremors, sweating, and tachycardia (Kholdiyah et al., 2021). Anxiety can also manifest as psychological tension that drives physiological urges such as hunger or sexual urges that cannot be controlled, resulting in trauma and feelings of emotional trauma (Putri et al., 2021). It is important for families to understand this condition because it can impact their ability to cope with critical situations. Anxiety is an emotional response to uncertainty, fear, or stress that arises without any apparent stimulus and can affect physiological conditions such as tremors, sweating, or tachycardia (Kholdiyah et al., 2021). Psychologically, anxiety can create inner tension that drives physiological urges such as hunger or sexual needs that cannot be met, resulting in emotional trauma and feelings of emotional trauma (Putri et al., 2021). Understanding anxiety is important in the family context because this condition can affect interactions between members, communication, and overall family functioning.

Anxiety is divided into four levels: mild, moderate, severe, and very severe (Putri et al., 2021). Mild anxiety promotes motivation, creativity, and problem-solving skills. Moderate anxiety limits focus to one's own thoughts but still allows an individual to function with guidance. Severe anxiety directs attention only to specific details, requiring extensive direction. Extreme anxiety causes loss of self-control, distorted perceptions, and difficulty performing activities even when given instructions. These levels indicate how anxiety intensity can impact an individual's psychological and social functioning. Factors influencing the onset of anxiety are divided into predisposing and precipitating factors (Putri et al., 2021). Predisposing factors encompass psychoanalytic, behavioral, interpersonal, and biological aspects that shape an individual's vulnerability to anxiety. Precipitating factors, on the other hand, encompass external factors, such as threats to the self-system and physical integrity, as well as internal factors, such as age, stressors, environment, gender, past experiences, education, and knowledge. The combination of these factors determines the extent to which an individual experiences anxiety and their ability to cope with stress, which can subsequently impact family dynamics and well-being.

Indicators of anxiety can be seen from the somatic and psychological symptoms that appear in an individual. Somatic symptoms include muscle tension, headaches, back pain, excessive sweating, respiratory problems, hypertension, and gastrointestinal disorders such as nausea, anorexia, constipation, and diarrhea (Kholdiyah et al., 2021). Psychological symptoms, on the other hand, include fatigue, mood disturbances, loss of interest and motivation, difficulty sleeping, feelings of unreality, difficulty concentrating, sensitivity to sound, confusion, and limited decision-making. Understanding these indicators is crucial for early recognition and appropriate management of anxiety. Anxiety management can be carried out through pharmacological and non-pharmacological approaches. Pharmacologically, medications such as benzodiazepines, buspirone, or antidepressants are used to balance neurotransmitters, but their use should be limited due to the risk of tolerance and dependence (Stahl, 2021; Baldwin et al., 2024). Non-pharmacological approaches include distraction, relaxation techniques such as meditation and

mindfulness, physical activity and a healthy lifestyle, and support from support groups and spirituality. Additionally, psychological approaches such as cognitive behavioral therapy (CBT), psychodynamic, humanistic, and biological approaches can also be applied to help individuals manage anxiety effectively (Hofman et al., 2012; Khoury et al., 2023; NICE, 2021). Instruments for assessing anxiety levels are diverse and can be used as needed. The Hamilton Anxiety Rating Scale (HARS) assesses physical and psychological symptoms on a scale of 0–4, while the Visual Analog Scale for Anxiety (VAS-A) assesses current anxiety using a 100 mm line. The Zung Self-Rating Anxiety Scale (ZSAS) records the frequency and duration of anxiety symptoms, while the State-Trait Anxiety Inventory (STAI) differentiates trait anxiety from state anxiety through 14–20 questions (Speilberger, 1983; Panambang, 2000; Davey et al., 2007). Using these instruments makes it easier for healthcare professionals to identify anxiety levels and plan appropriate interventions.

An Intensive Care Unit (ICU) is a part of a hospital that provides intensive care for patients with acute conditions or life-threatening injuries, in accordance with the Decree of the Minister of Health of the Republic of Indonesia Number 1778/Menkes/SK/XII/2010. The ICU is equipped with specialized medical equipment and professional staff to support the patient's vital functions, including the cardiovascular, respiratory, renal, and central nervous systems. ICU levels are divided into three: Level 1 for small hospitals with basic facilities and short-term ventilators, Level 2 for general hospitals with more complete laboratory support and diagnostic equipment, and Level 3 in referral hospitals that have invasive equipment and competent specialist staff. The scope of ICU services includes acute illness management, vital function monitoring, psychological support for patients and families, and temporary takeover of vital functions if necessary. Indications for ICU admission are divided into priority groups 1 to 3 based on the patient's condition, with certain exceptions such as patients who are permanently vegetative or who refuse intensive therapy. Discharge from the ICU is carried out when intensive therapy is no longer necessary or not beneficial, with an explanation to the patient's family.

Knowledge is the result of sensing that produces understanding or "knowledge" of an object, obtained through experience, information, and interaction with the environment. Knowledge can be obtained through various means, including trial and error, authority, chance, common sense, intuition, revelation, or systematic research methods. Levels of knowledge include knowing, understanding, application, analysis, synthesis, and evaluation. Factors that influence knowledge include education, access to information, employment, socio-cultural and economic factors, environment, experience, and age. Knowledge can be measured through questionnaires or interviews, with assessment categories divided into poor, sufficient, and good, based on the percentage of correct answers given by respondents. Understanding of the ICU and this knowledge is very important for health workers and the public to be able to make appropriate decisions in the care of critical patients and improve competence in understanding medical information. Theoretical framework:

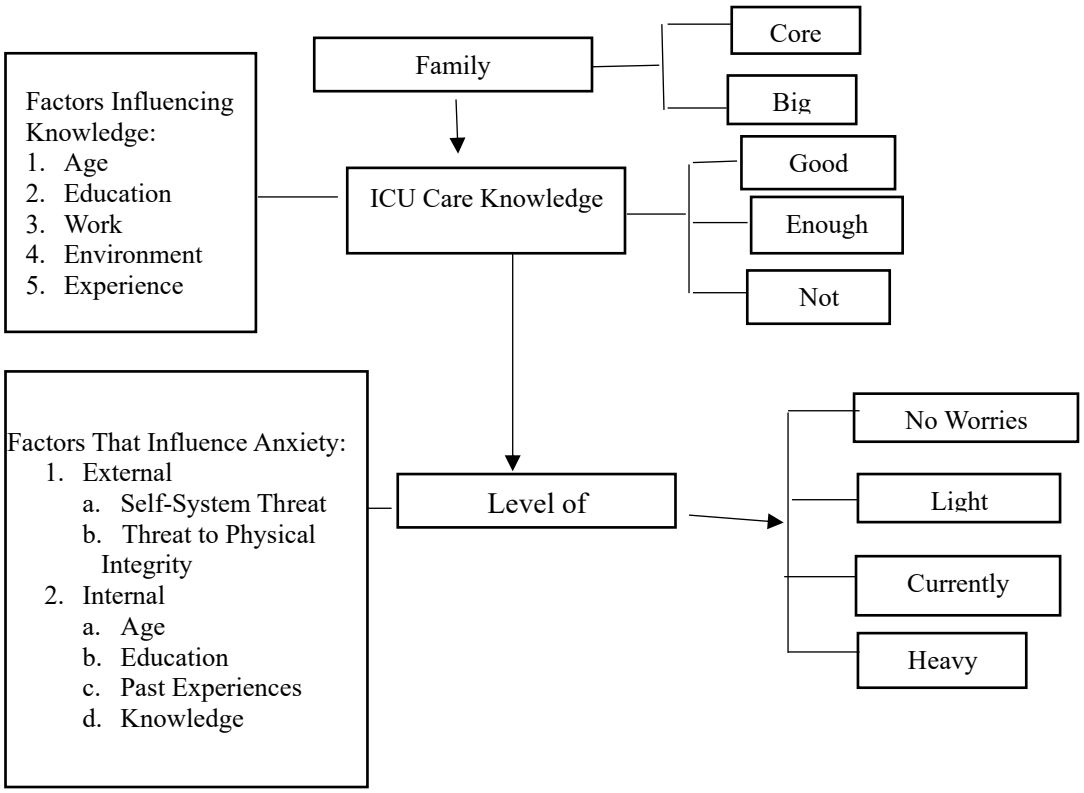

Figure 2.1 Research Theoretical Framework
Source: (Sangadah & Kartawidjaja, 2020) (Nursalam, 2019) (Putri et al, 2021)

Conceptual Framework

A research conceptual framework is a visual and descriptive description of the concepts and variables to be studied (Notoatmodjo, 2014). Based on theoretical studies, a research conceptual framework can be designed as follows:

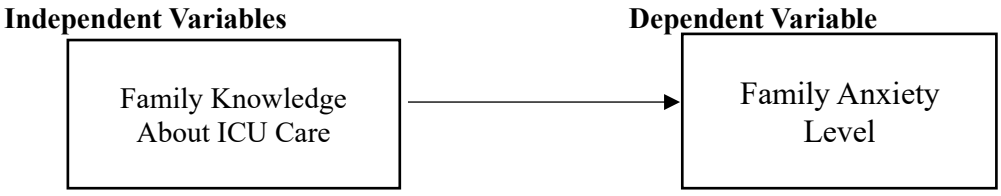

Figure 2.2 Research Concept Framework Scheme

Information

: Result Criteria

: Variables studied

A hypothesis is a tentative assumption made to guide research analysis regarding the possibility of a relationship between the variables being studied (Notoatmodjo, 2014). The hypotheses in this study are:

Ha : There is a relationship between family knowledge about ICU care and the level of family anxiety in the ICU room.

Ho : There is no relationship between family knowledge about ICU care and the level of family anxiety in the ICU.

METHOD

This study employed a quantitative method, grounded in the philosophy of positivism and scientific, objective, measurable, and systematic (Sugiyono, 2019). The aim was to test hypotheses by collecting and

statistically analyzing data from specific populations and samples. The design used was a descriptive correlational approach with a cross-sectional approach, aiming to determine the relationship between family knowledge about ICU care and the level of anxiety of patient families in the ICU of RSI Pati. The research variables consist of independent variables, namely family knowledge about ICU care, and dependent variables, namely the level of anxiety of the patient's family (Notoatmodjo, 2014). The study was conducted in the ICU RSI Pati in July 2025. The study population was the families of ICU patients, totaling 21 patients based on the average number of patients for two months, and the sample was taken using a purposive sampling technique using a total sampling of 21 respondents who met the inclusion and exclusion criteria. Inclusion criteria included immediate family members who cared for the patient, were literate and able to write, and monitored the patient's progress. Exclusion criteria included respondents who withdrew, were unable to complete the questionnaire, or did not complete the questionnaire completely (Notoatmodjo, 2018). This sampling technique aimed to ensure the sample was representative and matched the characteristics of the population being studied. This is a description of the limitations of the variables studied, variable observations, and instrument development (Notoatmodjo, 2014). The operational definition of the research will be outlined in the table:

Table 3.1 Operational Definitions

Variables	Operational Definition	How to Measure	Measurement results	Measuring scale
variables : Family knowledge about ICU care	Family knowledge about ICU care is information known by the family of patients being treated in the ICU so that it can reduce the level of anxiety that occurs in the family.	Measured using an ICU care knowledge questionnaire sheet consisting of 20 questions with correct = 1, wrong = 0	With measurement results: 1. Good 76-100% correct answers (15-20 questions). 2. Average 56-75% correct answers (11-14 questions) 3. Less than <56% correct answers (1-10 questions)	Ordinal
variable : Family anxiety	Anxiety is a feeling of concern in the families of patients being treated in the ICU due to the lack of	Measured using the HARS (*Hamilton Anxiety Rating Scale*) which consists of 14 questions: 0 = no symptoms at all, 1 = one of the	With measurement results:	Ordinal

levels in the ICU	knowledge the family has.	symptoms present, 2 = moderate / half of the symptoms present, 3 = severe / more than ½ of the symptoms present, 4 = very severe all the symptoms present	Score < 6 not anxious Score 6-14 mild anxiety Score 15-27 moderate anxiety score 28 -36 severe anxiety score > 36 very severe anxiety/panic

The research instrument used to systematically collect data (Notoatmodjo, 2018) was a questionnaire that measured family knowledge about ICU care and the level of anxiety of patient families in the ICU of RSI Pati. The questionnaire consisted of three sheets: Sheet A contained respondent identity and demographic characteristics such as gender, age, education, and occupation; Sheet B measured family knowledge using a questionnaire adapted from Ekawati's (2021) research, which had been expert-tested and proven significant (P Value = 0.01); and Sheet C measured family anxiety levels with 14 questions using the HARS scale of 0–4, ranging from no symptoms to very severe.

Instrument testing was conducted to ensure the validity and accuracy of the measurements. The validity of a measuring instrument indicates the extent to which the questionnaire accurately measures the intended concept (Notoatmodjo, 2018). The technique used was product-moment correlation, which allows researchers to assess the relationship between respondents' answers and the concept being measured, thus ensuring the questionnaire can be used reliably in this study (Notoatmodjo, 2014; Wasis, 2008).

1. Validity Test

$$R = \frac{N\ (EXY)\ (EX\ \ EY)}{VI\ \ (NEX\ -\ EX)\ (NEX)}$$

Figure 3.1 ***Pearson Product Moment Formula***

Information :
X : Question
N : Number of respondents
XY : Score for question number 1 multiplied by total score
Y : Total score

2. Reliability Test

Reliability is a measure of the extent to which a measuring instrument is reliable and consistent in measuring the same variable (Notoatmodjo, 2018). Reliability testing is conducted using **Cronbach's alpha coefficient** on all questionnaire items simultaneously. A measuring instrument is considered **reliable** if the α value is > 0.60 (Sujarweni, 2014).

$$r = \frac{k}{k-1}[1 - \frac{\Sigma\sigma b^2}{\sigma t^2}]$$

Figure 3.2 Reliability Test Formula

Information :
k : number of questions
σ t^2 : total variance
∑ σ b^2 : total item variance
r : Instrument reliability coefficient (Cronbach alpha)

The HARS anxiety questionnaire has been tested for reliability with a value of 0.97.

The data processing technique in this study followed several systematic steps (Notoatmodjo, 2014). The first stage was editing, which involved re-examining each questionnaire to ensure completeness and accuracy. Next, coding was performed, assigning each data category a numerical code to facilitate processing

and analysis, for example, codes for gender, age, education, occupation, ICU knowledge level, and anxiety level. The data was then entered into a computer database or master table, allowing contingency tables to be created and ready for analysis using appropriate statistical techniques. Data analysis consisted of univariate and bivariate analyses. Univariate analysis was used to describe the characteristics of each variable, typically producing percentages and frequency distributions. Furthermore, bivariate analysis was conducted to determine the relationship between two variables suspected of being correlated. In this study, the Spearman Rank test was applied because the variables tested were ordinal, allowing researchers to assess the relationship between families' knowledge of ICU care and their anxiety levels. The research process includes preparation and implementation stages, starting with determining the research problem and title, consulting with a supervisor, conducting a preliminary study, collecting data through a questionnaire, and analyzing and presenting the research results. Research ethics are also implemented to protect respondents' rights, including informed consent, anonymity, confidentiality, the principle of fairness, and the benefits of the research. This ensures that the research is conducted systematically, objectively, and respects the rights and privacy of each respondent (Notoatmodjo, 2014).

RESULTS AND DISCUSSION

This research was conducted at the Pati Islamic Hospital (RSI), located at Jalan Raya Pati-Tayu No. Km.18, Kampunganyar, Waturoyo, Margoyoso District, Pati Regency, Central Java. RSI Pati is a private hospital under the auspices of the Muslimat NU Pati Welfare Foundation, which plays a role in supporting the government in improving, preventing, curing, restoring health, and implementing referral efforts. As a hospital based on Islamic values, RSI Pati has a high commitment to professional and quality health services, with missions including providing services in accordance with developments in science and technology, organizing Islamic services, improving the quality of human resources, developing modern infrastructure, and improving employee welfare. One of its superior facilities is the ICU room, which is the focus of this research.

a. Respondent Characteristics Based on Gender

Table 4.1 Respondent Characteristics Based on Gender

GENDER		
	Frequency	Percent
Man	10	47.6
Woman	11	52.4
	21	100.0

Based on the gender distribution table above, out of 21 respondents, 11 respondents were female, amounting to 52.4%.

b. Respondent Characteristics Based on Age

Table 4.2 Respondent Characteristics Based on Age

AGE		
	Frequency	Percent
20 - 30 years	3	14.3
30 - 40 years	5	23.8
40 - 50 years	7	33.3
50 years and above	6	28.6
Total	21	100.0

Based on the age distribution table, most respondents were aged 40-50 years, as many as 7 people or 33.3%, and a small number were aged 20-30 years, as many as 3 people or 14.3%.

c. Respondent Characteristics Based on Occupation

Table 4.3 Respondent Characteristics Based on Occupation

WORK		
	Frequency	Percent
Farmer	8	38.1

Private	7	33.3
Government employees	4	19.0
Indonesian National Armed Forces/Indonesian National Police	2	9.5
Total	21	100.0

Based on the job distribution table, most respondents work as farmers, as many as 8 respondents or 38.1%, while the fewest work as TNI/POLRI, as many as 2 respondents or 9.5%.

d. Respondent Characteristics Based on Education

Table 4.4 Respondent Characteristics Based on Education

	WORK	
	Frequency	Percent
No school	3	14.3
Elementary School	4	19.0
JUNIOR HIGH SCHOOL	7	33.3
SENIOR HIGH SCHOOL	6	28.6
College	1	4.8
Total	21	100.0

Based on the education distribution table, the majority of respondents had a junior high school education of 7 respondents or 33.3% and the least had a college education of 1 respondent or 4.8%.

1. Univariate Analysis
   a. Frequency Distribution of ICU Care Knowledge

Table 4.5 Frequency Distribution of ICU Care Knowledge

	WORK	
	Frequency	Percent
Good	7	33.3
Currently	9	42.9
Not enough	5	23.8
Total	21	100.0

Based on the table above, the results show that the majority of respondents had moderate knowledge, namely 9 respondents or 42.9%, while those with less knowledge were 5 respondents or 23.8%.

b. Frequency Distribution of Family Anxiety

Table 4.6 Frequency Distribution of Family Anxiety

	WORK	
	Frequency	Percent
No Worries	2	9.5
Mild Anxiety	6	28.6
Moderate Anxiety	9	42.9
Severe Anxiety	3	14.3
Extreme Anxiety/Panic	1	4.8
Total	21	100.0

Based on the table above, the majority of respondents experienced moderate anxiety, as many as 9 respondents or 42.9%, and there were those who experienced very severe anxiety to the point of panic, as many as 1 respondent or 4.8%.

2. Bivariate Analysis

Table 4.7 Relationship between ICU Care Knowledge and Family Anxiety

Correlations

			ICU Knowledge	Anxiety
Spearman's rho	ICU Knowledge	Correlation Coefficient	1,000	.855 **
		Sig. (2-tailed)		.000
		N	21	21
	Anxiety	Correlation Coefficient	.855 **	1,000
		Sig. (2-tailed)	.000	.
		N	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the table above, the significance value (2-tailed) is 0.000. Because this value is less than 0.005, there is a significant relationship between ICU care knowledge and family anxiety. Furthermore, the table also shows a correlation coefficient of 0.855, indicating a very strong correlation. This positive correlation coefficient indicates a positive relationship between ICU care knowledge and family anxiety, meaning that the higher the family's knowledge, the higher the level of anxiety experienced. The characteristics of the respondents in this study indicate that the majority were women (52.4%), with a dominant age of 40–50 years (33.3%), and occupations as farmers (38.1%). These findings indicate that women tend to have higher levels of anxiety than men, influenced by hormonal factors and emotional responses. More mature age influences coping abilities, so individuals with more life experience are more likely to be able to suppress anxiety. Occupation and education level also influence anxiety levels; individuals with higher occupations or education typically have better access to information and more mature adaptation skills, resulting in lower anxiety.

The majority of respondents' knowledge of ICU care was moderate (42.9%), influenced by age, education, occupation, and ease of access to information. Adequate knowledge helps families understand the patient's condition and treatment procedures, thereby reducing anxiety levels. These findings align with previous studies showing that family knowledge of critical care nursing correlates with anxiety, with families with better knowledge tending to be calmer when dealing with patients in the ICU. Analysis of the relationship between ICU care knowledge and family anxiety levels showed a very strong and significant correlation ($\rho = 0.000$; $p < 0.005$), with a positive direction. This confirms that increasing family knowledge regarding intensive care can reduce anxiety, because families better understand the patient's condition and the treatment procedures performed. This research is supported by other studies that have shown a significant relationship between knowledge and anxiety of families of patients in the ICU. However, this study has limitations, including the limited number of respondents (21 people) and the limited time frame of the study, so the results may not be fully representative of the broader population of ICU patient families.

CONCLUSION

Based on the results of research and discussion regarding the Relationship between Knowledge of ICU Care and the Level of Family Anxiety in the ICU Room of RSI Pati, which involved 21 respondents, the following conclusions can be drawn regarding the relationship between family knowledge regarding ICU care and the level of anxiety they experience while accompanying patients.

1. Based on the research, the majority of respondents were female, 11 people (52.4%). Most were aged 40–50 years, 7 people (33.3%), while the fewest were aged 20–30 years, 3 people (14.3%). In terms of occupation, the majority worked as farmers, 8 respondents (38.1%), while the fewest were members of the Indonesian National Armed Forces (TNI/POLRI), 2 respondents (9.5%).
2. The results of the study of 21 respondents in the ICU room of RSI Pati showed that most respondents had moderate knowledge regarding ICU care, namely 9 people (42.9%).
3. The study also found that most respondents experienced moderate levels of anxiety, namely 9 people (42.9%).
4. It can be concluded that there is a relationship between knowledge of ICU care and the level of family anxiety, as evidenced by the significance value of P (sig) = 0.000, which is less than 0.05.

SUGGESTION

Based on the conclusions above, the suggestions we can convey are:

1. For respondents or patient families

It is hoped that families will be more active in asking health workers in the ICU to get information about the patient's condition.

2. For RSI Pati
   It is hoped that the results of this study can be used as a reference to improve the quality of services at RSI Pati, especially by providing information regarding patient care in the ICU through electronic media and other publications.
3. For further researchers
   It is hoped that other variables can be added or the number of respondents can be increased to perfect the research.

REFERENCES

Ananda, MR, Doctor, PP, Medicine, F., & Utara, US (2017). Characteristics of ICU Patients at H Adam Malik General Hospital in 2014-2016. Characteristics of ICU Patients at H Adam Malik General Hospital in 2014-2016. 1–50.

Baldwin, D.S., et al. (2024). Evidence-based pharmacological treatment of anxiety disorders. International Journal of Psychiatry in Clinical Practice, 28(2), 112–128.

Bloor, M., & Wood, F. (2019). The relationship between family knowledge about critical care nursing and family anxiety levels in the ICU. The Relationship Between Family Knowledge About Critical Care Nursing and Family Anxiety Levels in the ICU, 7(1). https://doi.org/10.4135/9781849209403.n73

Dahlan. 2014. Statistics for Medicine and Health. Jakarta: Indonesian Epidemiology.

Dhani Mulyono (2024) "The Relationship Between Nurses' Therapeutic Communication and the Level of Anxiety of Patients' Families Treated in the Intensive Care Unit (ICU) of Uobk Jampangkulon Regional Hospital, West Java Province" https://jurnal.ummi.ac.id/index.php/lentera/issue/view/195

Devina Ayuningtyas[1], Adi Buyu Prakoso[2]*, Endrat Kartiko Utomo[2] (2024) "The relationship between knowledge and information needs with the level of anxiety of patient families in the ICU of Pandan Aran Hospital, Boyolali " https://eprints.udb.ac.id/id/eprint/3156/

Ekawati Hijriyah (2021) "The relationship between family knowledge and anxiety levels in family members treated in the intensive care unit (ICU) of Sultan Imanuddin Regional Hospital, Pangkalan Bun" https://repository.stikesbcm.ac.id/id/eprint/144/

Handoko, R. (2012). Health Statistics.

Hidayat. 2017. Nursing Research Methods and Data Analysis Techniques. Ja: Salemba Medika.

Hidayat A. Aziz Alimul. 2017. Nursing Research Methods and Data Analysis Techniques. Jakarta: Salemba Medika.

Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012). The Efficacy of Cognitive Behavioral Therapy: A Review of Meta-analyses. Cognitive Therapy and Research, 36(5), 427–440.

Jeklin, A. (2019). Critical Care Nursing Concepts. July, 1–23.

Kholdiyah, Dina, Sutomo, and Nuris Kushayati. 2021. "The Relationship Between Public Perception of the Covid-19 Vaccine and Anxiety When Undergoing the Covid-19 Vaccination." Nursing 14(2):8–20.

Khoury, B., Lecomte, T., Fortin, G., et al. (2023). Mindfulness-based therapy: A meta-analysis. Clinical Psychology Review, 95, 102119.

Leonita Widiastuti1*, Andi Lis Arming Gandini2, Diah Setiani3 2023 "The Relationship Between Length of Hospitalization and Family Anxiety Level of Patients Treated in the ICU Room of Dr. H. Soemarno Sosroatmodjo Hospital" Saintekes–Volume 2 number 2 (2023) 225- 233 https://ejournal.itka.ac.id/index.php/saintekes/article/view/78/78

Mugihartadi, Ahmad Muzaki, Tutik Isnaini (2024) "The Relationship between the Implementation of Communication, Information, and Education on Heart Disease and the Anxiety of Patient Families in the ICU" Vol. 14. No. 2 (2024): Jurnal sains permas: Jurnal sains STIKES kendal (2024) https://journal2.stikeskendal.ac.id/index.php/PSKM/article/view/1730

NICE. (2021). Generalized anxiety disorder and panic disorder in adults: management. National Institute for Health and Care Excellence.
Notoadmodjo, s. 2014. Health Research Methodology. Jakarta: Salemba Medika.
Nototamodjo. 2018. Health Research Methods. Jakarta: Rineka Cipta.
Nototamodjo, Soekidjo. 2010. Health Behavior Science. Jakarta: Rineka Cipta.
Nursalam. 2008. Concept of Nursing Science Research Methodology. Jakarta: Salemba Medika.
Nursalam. 2019. The Relationship Between Family Knowledge About Critical Care Nursing and Family Anxiety Levels in the ICU. Jakarta: Salemba Medika.
Notoatmodjo, S. (2014). Health Research Methodology. Salemba Medika.
Putri, KE, K. Wiranti, YS Ziliwu, M. Elvita, Frare D. Y, Purdani R. S, S. Niman, and ... 2021. "Public Anxiety Regarding Covid-19 Vaccination." Journal of Nursing … 9(3):539–48.
Salah, M., Tugas, S., & Ajar, M. (2015). Critical Intensive Care Unit of Tugurejo Semarang Regional Hospital, Diponegoro University. Consent Form.
Sangadah, K., & Kartawidjaja. (2020). The relationship between family knowledge about critical care nursing and family anxiety levels in the ICU. Orphanet Journal of Rare Diseases, 21(1), 1–9.
Saryono. 2009. Health Research Methods. Yogyakarta: Mitra Cendikia.
Sekaran, Holliday, COJ, Schmidheiny, S., Watts, P., Schmidheiny, S., Watts, P., Montgomery, H., Pmi, University of Pretoria, Gentry, R.R., Lester, S.E., Kappel, C.V., White, C., Bell, T.W., Stevens, J., Gaines, S.D., Zavadskas, E.K., Cavallaro, F., Podvezko, V., … Branch, B. (2018). Critical nursing knowledge relationships. Pakistan Research Journal of Management Sciences, 7(5), 1–2. http://content.ebscohost.com/ContentServer.asp?EbscoContent=dGJyMNLe80Sep7Q4y9f3OLCmr1Gep7JSsKy4Sa6WxWXS&ContentCustomer=dGJyMPGptk%2B3rLJNuePfgeyx43zx1%2B6B&T=P&P=AN&S=R&D=buh&K=134748798%0Ahttp://amg.um.dk/~/media/amg/Documents/Policies and Strategies/S
Sangadah, K., & Kartawidjaja. (2020). The Relationship Between Family Knowledge of Critical Care Nursing and Family Anxiety Levels in the ICU. Orphanet Journal of Rare Diseases, 21(1), 1–9
Sopiyudin, D. (2014). Descriptive, Bivariate, and Multivariate Statistics.
Stahl, S. M. (2021). Stahl's Essential Psychopharmacology (5th ed.). Cambridge University Press.
Sugiyono. 2010. Quantitative Research Methods. Bandung: Alfabeta.
Sugiyono. 2013. Statistics for Research. Bandung: Alfabeta.
Sujarweni, VW. 2014. Nursing Research Methodology. Yogyakarta: Gava Media.
Syarifudin, A. (2020). The relationship between family knowledge about critical care nursing and family anxiety levels in the ICU. 2507(February), 1–9.